

12-49. The system of claim 38, wherein said handle comprises

a grip; and

a member connected to the grip, wherein at least one cam groove is defined in the member.

13-50. The system of claim 38, wherein said expander comprises:

an expander tip at its distal end; and

an annular groove proximal to the expander tip.

14-51. The system of claim 50, wherein the expander tip has a diameter that varies along at least a portion of its length.

15-52. The system of claim 50, wherein an edge of the annular groove is beveled.

16-53. The system of claim 38, wherein the holder tube and the expander are substantially concentric.

17-54. The system of claim 38, wherein the holder tube is substantially radially symmetrical along at least a portion of its length.

18-55. The system of claim 38, wherein the expander is substantially radially symmetrical along at least a portion of its length.

19-56. The system of claim 38, wherein at least a portion of the holder tube is substantially cylindrical.

20 57. The system of claim 38, wherein at least one end of the holder tube is open.

21 58. The system of claim 38, wherein at least a portion of the expander is substantially cylindrical.

22 59. The system of claim 38, wherein said expander is slidable away from the anastomosis device after expansion of the anastomosis device.

60. A tool for deploying an anastomosis device, comprising:

a first member configured to hold the anastomosis device; and

a second member, said first member and said second member slidable relative to one another, wherein relative motion of said first member and said second member causes radial expansion of the anastomosis device.

61. The system of claim 60, further comprising a handle connected to at least one of said first member and said second member.

62. The system of claim 61, wherein said handle is rotatable about an axis.

63. The system of claim 61, wherein actuation of said handle causes said first member to slide relative to said second member.

23
24 64. The system of claim 60, wherein said first member and said second member are substantially concentric.

25. 65. The system of claim ²³60, wherein said first member is substantially radially symmetrical along at least a portion of its length.

26. 66. The system of claim ²³60, wherein said second member is substantially radially symmetrical along at least a portion of its length.

27. 67. The system of claim ²³60, wherein at least a portion of said first member is substantially cylindrical.

28. 68. The system of claim ²³60, wherein at least one end of said first member is open.

29. 69. The system of claim ²³60, wherein at least a portion of said second member is substantially cylindrical.

30. 70. The system of claim ²³60, wherein said first member is a tube.

31. 71. The system of claim ²³60, wherein said second member is a tube.

72. An anastomosis system, comprising:

an anastomosis device deployable from a first configuration to a second configuration,

wherein said second configuration includes at least one flange;

a first member configured to hold the anastomosis device; and

a second member, said first member and said second member slidable relative to one another, wherein motion of at least part of said first member deploys at least one said flange of said anastomosis device.

73. The system of claim 72, further comprising a handle connected to at least one of said first member and said second member.

74. The system of claim 73, wherein said handle is rotatable about an axis.

75. The system of claim 73, wherein actuation of said handle causes said first member to slide relative to said second member.

34 76. The system of claim ³³72, wherein said first member and said second member are substantially concentric.

35 77. The system of claim ³³72, wherein said first member is substantially radially symmetrical along at least a portion of its length.

36 78. The system of claim ³³72, wherein said second member is substantially radially symmetrical along at least a portion of its length.

37 79. The system of claim ³³72, wherein at least a portion of said first member is substantially cylindrical.

38 80. The system of claim ³³72, wherein at least one end of said first member is open.

39 ~~81~~³³. The system of claim ~~72~~³³, wherein at least a portion of said second member is substantially cylindrical.

40 ~~82~~³³. The system of claim ~~72~~³³, wherein said first member is a tube.

41 ~~83~~³³. The system of claim ~~72~~³³, wherein said second member is a tube.